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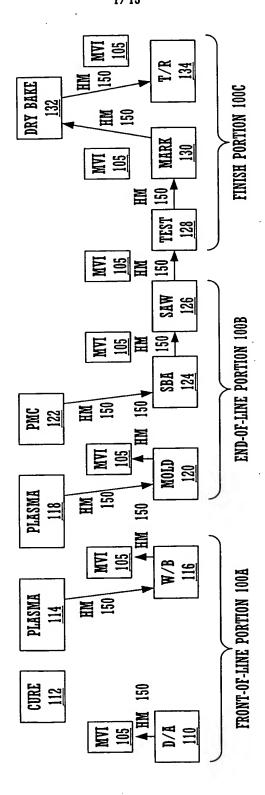
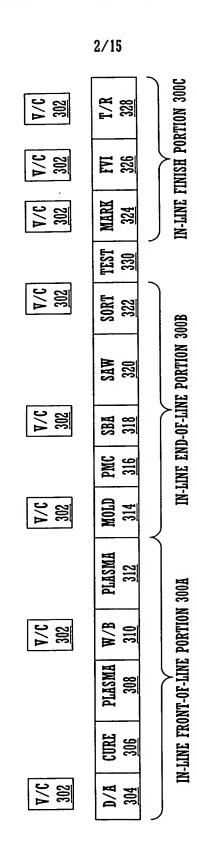


FIGURE 1 (Conventional Art)





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IN-LINE FRONT-OF-LINE PORTION 300A

PLASMA CURE 306 D/A 304

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SAW 320 IN-LINE END-OF-LINE PORTION 300B SBA 318 PMC 316



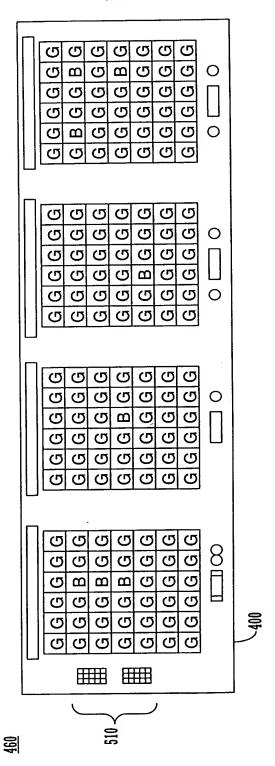
5/15

T/R 328 IN-LINE FINISH PORTION 300C 328 328 MARK 324

TITLE: AN INTEGRATED BACK-END INTEGRATED CIRCUIT MANUFACTURING ASSEMBLY INVENTOR(S): Bo Soon Chang

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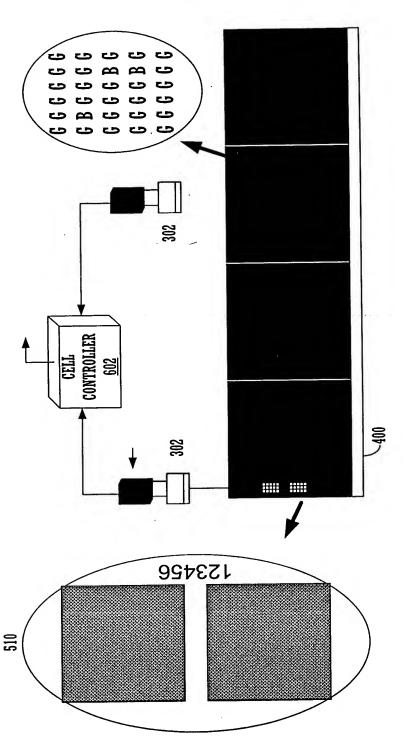




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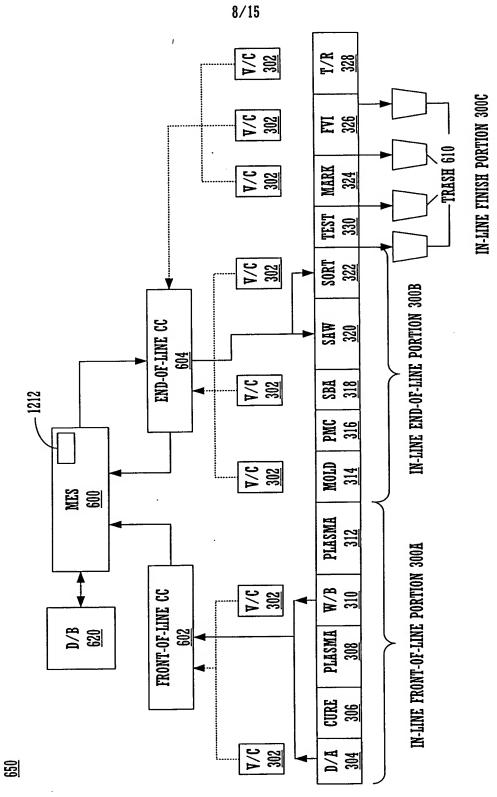


FIGURE 6

TITLE: AN INTEGRATED BACK-END INTEGRATED CIRCUIT MANUFACTURING ASSEMBLY INVENTOR(S): Bo Soon Chang
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800

START

PROCESSING A DIE-STRIP THROUGH A FRONT-OF-LINE ASSEMBLY PORTION WHICH COMPRISES A PLURALITY OF SUB-STATIONS OPERATING ON AN IN-LINE BASIS.

<u>802</u>

AUTOMATICALLY PROVIDING THE DIE-STRIP TO AN END-OF-LINE ASSEMBLY PORTION.

**804** 

PROCESSING THE DIE-STRIP BY THE END-OF-LINE ASSEMBLY PORTION WHICH COMPRISES A PLURALITY OF SUB-STATIONS OPERATING ON AN IN-LINE BASIS.

<u>806</u>

AUTOMATICALLY PROVIDING THE DIE-STRIP TO A TEST ASSEMBLY PORTION.  $808\,$ 

TESTING THE DIE-STRIP USING THE TEST ASSEMBLY PORTION.

810

AUTOMATICALLY PROVIDING THE DIE-STRIP TO A FINISH ASSEMBLY PORTION.
812

PROCESSING THE DIE-STRIP BY THE FINISH ASSEMBLY PORTION WHICH COMPRISES A PLURALITY OF SUB-STATIONS OPERATING ON AN IN-LINE BASIS.

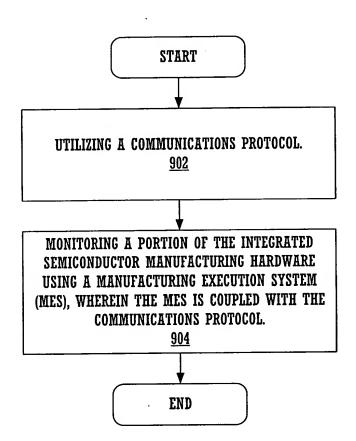
<u>814</u>

END



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<u>900</u>





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1000 START IMPLEMENTING A TRACKING PROCESS FOR THE DIE-STRIP WHICH IDENTIFIES INDIVIDUAL DIE-STRIPS AND THEIR RESPECTIVE LOCATIONS AS THEY TRAVERSE THROUGH THE IN-LINE ASSEMBLY LINE. 1002 ACCESSING AN ELECTRONIC DIE-STRIP MAP DATABASE THAT PROVIDES PARAMETER STORAGE FOR EACH INDIVIDUAL SEMICONDUCTOR COMPONENT WITHIN EACH DIE-STRIP. 1004 UTILIZING THE TRACKING PROCESS TO UPDATE THE ELECTRONIC DIE-STRIP MAP DATABASE AT EACH SUBSTATION THAT COLLECTS PARAMETER INFORMATION. 1006 CATEGORIZING THE DIE ON THE DIE-STRIP BASED ON INFORMATION MAINTAINED BY THE ELECTRONIC DIE-STRIP MAP DATABASE AND SPECIFICALLY REJECTING BAD DIE AND USING PARAMETER INFORMATION TO SORT DIE. 1008

FIGURE 10

END



## TITLE: AN INTEGRATED BACK-END INTEGRATED CIRCUIT MANUFACTURING ASSEMBLY INVENTOR(S): Bo Soon Chang

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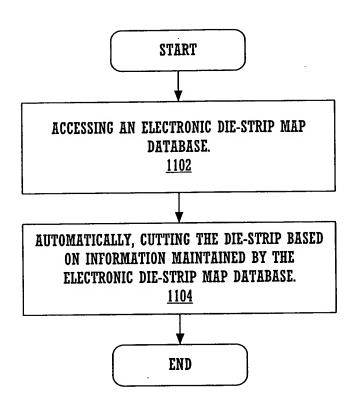


FIGURE 11



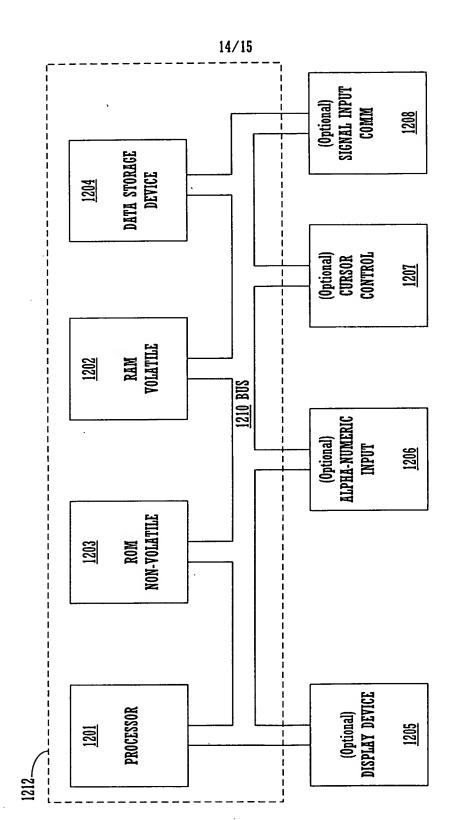


FIGURE 12

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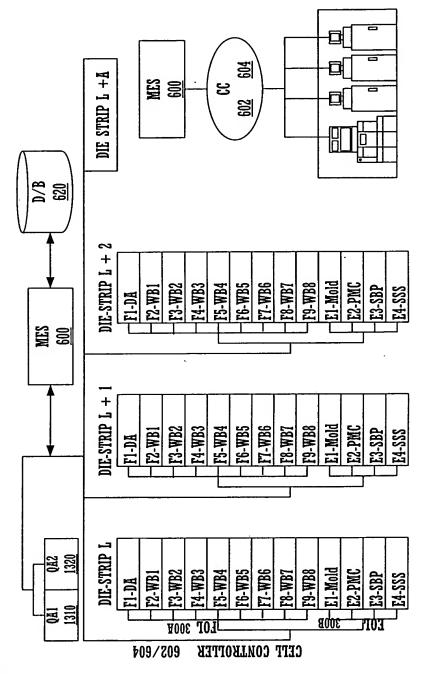


FIGURE 13